APPENDIX H

HQUSACE Economic Guidance

DEPARTMENT OF THE ARMY

U.S. Army Corps of Engineers WASHINGTON, D.C. 20314-1000

REPLY TO ATTENTION OF:

CEMP-SWD

2 7 FEB 2006

MEMORANDUM FOR Commander, Southwestern Division (CESWD-PDS-P)

SUBJECT: Request for Waiver from Economic Guidance Memorandum 05-01 for the Sabine-Neches Waterway Feasibility and Texas City Channel Limited Reevaluation Studies

- 1. Reference: CESWG-PE memorandum dated 21 November 2005, subject: Request For Waiver From Economic Guidance Memorandum 05-01 for the Sabine-Neches Waterway Feasibility and Texas City Channel Limited Reevaluation Studies.
- 2. This memorandum provides a formal response to reference 1.a. above, which requested waiver from EGM 05-01 for the Sabine-Neches Waterway Feasibility and the Texas City Channel Limited Reevaluation Studies in the Memorandum for the Commander dated 21 November 2005. CECW-CP provided guidance by e-mail dated 14 December 2005 to facilitate the District's adherence to the study schedule.
- 3. The request for a waiver regarding application of deep-draft vessel operating costs as forwarded by the Galveston District is not approved. The request for the waiver is based on the concern over the recent spread of fuel or bunkerage prices between what is estimated for dredge plant operation versus cargo vessel operation. HQUSACE, with assistance from the Institute of Water Resources (IWR), is continuing to discuss the various cost estimating practices and the approaches that may be required when the prices of fuel (or other commodities, such as steel) are highly fluctuating. Additional guidance will be forthcoming at the conclusion of those discussions.
- 4. Enclosed, please find additional information to clarify the HQUSACE response to the district waiver request, and an interim approach for the district to use in advance of formal guidance. IWR completed interim economic analyses to develop a price adjustment that would be applicable to existing estimates of inland vessel bunkerage costs for approximation of deep-draft or coastal dredge plant costs. The analyses yielded an estimate of \$1.119 per standard gallon (MDO or higher-level distillates). This estimated value of dredge bunkerage costs will apply to the NED economic analysis of navigation projects until revised, superseded, or otherwise directed by HQUSACE. However, the cost estimator still needs to apply current market costs, as is their usual practice, for the development of the fully funded project cost estimate. If you have additional questions, please request a telephone conference to discuss in more detail.

FOR THE COMMANDER:

Encl

PATRICIA A. RIVERS, P.E. Chief, Southwestern Division Regional Integration Team

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Directorate of Military Programs

Sabine-Neches Waterway Feasibility and Texas City Channel Limited Reevaluation Studies

Request for Waiver from Economic Guidance Memorandum 05-01

- 1. Additional Information to Clarify HQUSACE Response to District Waiver Request.
- a. Currently, for purposes of economic analysis, estimation of fuel costs for dredge plant operation relies upon immediate-term or current spot market prices. The estimation of fuel costs for cargo vessel operations is based on a five-year moving average. The differing approaches to estimation are based on the assumption or principle that dredge plant costs are expected to be incurred in the relative near future, when a justified project is constructed, while cargo vessel operations costs are expected to be incurred during the project economic life (normally 50 years). In the latter case, the moving average is intended to smooth or reduce short-term or temporary spikes or market fluctuations in bunker costs for constant dollar price estimates applied for present valuation of project benefit streams over the project economic life.
- b. Based on this logic, dredge plant and cargo vessel bunkerage costs will almost certainly be different but the margin between estimates is usually not so pronounced as with the volatility exhibited in the energy markets over the past year. In addition to short-run versus long run considerations, there are other factors that cause dredge plant fuel costs to differ from that paid by deep-draft carriers. Domestic dredges have limited sources of supply and purchase fuel in smaller allotments. These often cause dredge fuel prices to exceed those charged deep-draft carriers.
- c. The rationale for the five-year moving average as applied for deep-draft cargo carriers is based in large part on combined consideration of both domestic and international business cycles, in addition to cycles of asset turnover in deep-draft transportation markets. A review of inland vessel fuel prices indicates that fuel prices paid by inland vessels is more comparable to those paid by dredges than those paid by deep-draft carriers for the reasons cited above. However, the potential issue concerning taxes or related surcharges levied on inland vessel fuel purchases or fuel for vessels supported by the inland waterway system versus dredge plant will need to be further researched. A four-year moving average is used to estimate inland vessel bunkerage costs.
- d. The recommended approach for economic analysis, in lieu of the waiver, is to use deep draft vessel operating costs as published in EGM 05-01 for benefit estimates and to use a four-year moving average for dredging plant fuel cost estimates.
- e. As a result of this waiver request, the Institute for Water Resources completed basic research and analysis to develop a price adjustment applicable to existing estimates of inland vessel bunkerage costs for approximation of deep-draft or coastal dredge plant costs. Available data and information was compiled from cost estimators at those USACE Districts that monitor